

SYSTEM AND METHOD FOR BATTERY PROTECTION STRATEGY FOR HYBRID ELECTRIC VEHICLES

Abstract

A method for controlling a hybrid powertrain system includes the steps of determining a first power state of the hybrid powertrain system, limiting electrical power generated by a generator to the minimum of the rated power limit of the generator and the first power state, when the first power state is greater than zero, and limiting the electrical power generated by the generator to zero, and limiting the power limit of an electric machine during generating to a first operating condition of the hybrid powertrain system, when the first power state is less than or equal to zero, to provide over-charge protection to the battery. The method further includes steps that provide over-discharge protection to the battery.